

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A method of generation and homodyne detection comprising ~~selecting a length of electric path, wherein an equal value is selected of both electrical paths between shunt arm in waveguide T connection and generated diode in one collinear arm, and in the second collinear arm between the same shunt arm and detection diode providing electrical paths each having an equal value, the electrical paths between a shunt arm in a waveguide T-connection and a generation diode in one collinear arm and a detection diode in another collinear arm such that signals from a single microwave antenna that both radiates to and receives signals reflected from an inspected object are used for inspection.~~
2. (Currently Amended) A generation and homodyne detection system containing generation Gunn diode seating connected with one collinear arm, and detection diode seating connected with the second collinear arm significant by waveguide T-connection between generation diode seating and detection diode seating and a single microwave antenna for radiating to and receiving signals from an inspected object, the waveguide T-connection connected to the microwave antenna.
3. (New) The method of claim 1 wherein signals from the single microwave antenna are received by the waveguide T-connection.